

Answer 1:

Bibliographic Information

Interferon γ increases the antitumor activity of mitomycin C against human colon cancer cells in vitro and in vivo.

Ishihara, Masami; Kubota, Tetsuro; Watanabe, Masahiko; Kawano, Yukio; Narai, Shin; Yasui, Nobutaka; Otani, Yoshihide; Teramoto, Tatsuo; Kitajima, Masaki. Department of Surgery, School of Medicine, Keio University, Tokyo, Japan. *Oncology Reports* (1999), 6(3), 621-625. Publisher: Oncology Reports, CODEN: OCRPEW ISSN: 1021-335X. Journal written in English. CAN 131:97102 AN 1999:285763 CAPLUS (Copyright (C) 2008 ACS on SciFinder (R))

Abstract

A combined antitumor activity of mitomycin C (MMC) and interferon γ -1a (IFN- γ) was evaluated to be synergistic by the 3-(4,5-dimethylthiazol-2-yl)-2,5-diphenyl-2H-tetrazolium bromide assay and human tumor xenografts/severe combined immunodeficient (SCID) mouse system using colon cancer cell lines. The exptl. metastasis of WiDr cells in SCID mouse was inhibited by MMC and IFN- γ with their synergism. Intracellular uptake of MMC in WiDr cells in vitro was significantly increased by IFN- γ , suggesting the mode of synergism of these agents. This model may also partly explain the antitumor activity of combined MMC, 5-fluorouracil and interleukin-2 treatment on hepatic metastasis of colon cancer.